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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,505	02/13/2004	Qiwei He	3075.NWN	8910
7590 Cynthia L. Foulke NATIONAL STARCH AND CHEMICAL COMPANY 10 Finderne Avenue Bridgewater, NJ 08807-0500			EXAMINER MULLIS, JEFFREY C	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 12/31/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/779,505

Applicant(s)

HE ET AL.

Examiner

Jeffrey C. Mullis

Art Unit

1796

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on RCE of 12-12-07.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 6-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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Claims 3-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is unclear in that it recites that the radial copolymer is part diblock despite the fact that a diblock copolymer is not a radial block copolymer as the term is normally used in the art nor as defined by the structure of claim 1. Furthermore it is not clear what the percentage of claim 3 is based on since this is unstated.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lechat et al. (US2005/0020773)..

The reference disclose an adhesive composition having 31 % total block copolymer which has about 50% radial block copolymer based on total block copolymer content

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lithium terminated living polymer chains. Addition of polymers is disclosed at column 7, lines 15-26.

Claims 1-4 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kueppers (US 5,939,483).

Patentees disclose an adhesive composition having as much as 40 % of a block copolymer, compatible polymer, tackifier and wax. Note the abstract. The compatible polymers include the block copolymers of applicants' claim 6 at column 5, lines 30-36. The block copolymers include partially coupled radial copolymers of applicants molecular weight at column 4, lines 25-50.

No specific examples exist having all of applicants combination of materials. However, choice of such would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of adequate results given that patentees disclosure lies within the broad ambit of the claims, absent any showing of surprising or unexpected results.

Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Asahara (US 5,532,319).

Patentees disclose an adhesive composition which may contain coupled styrene-isoprene-butadiene block copolymer in combination with uncoupled material (encompassing applicants linear polymer). Note Examples 5 and 6 in Table 1 and column 3, lines 63-67 where tackifiers may be added.

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4 and 6-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 10/779,420. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of the two sets of claims overlap.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant's arguments filed 12-12-07 have been fully considered but they are not persuasive. Applicant's requirement that  $n$  be a minimum of 3 for their radial block copolymers is in contradiction to the feature of claim 3 reciting that some of the radial block copolymer is diblock (i.e.,  $n=1$ ).

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and having SIB arms of molecular weight 80,125 molecular weight and 69 % tackifier. Note paragraphs 116-118 and the Table in paragraph 118. Note styrene contents of 15-35% in paragraphs 68-69. With re to claim 6, paragraph 116 discloses the presence of two arm radial (i.e. linear block copolymer) which could be viewed as styrene isoprene styrene. With re to claim 11, patentees block copolymers themselves would have at least some elastomeric properties given that diene polymers (as are present in the form of a block in the block copolymers of the reference) are generally elastomeric and articles containing labels such as bottles are generally disposed of after use the articles of the reference can be said to be disposable and elastic.

There are no examples in Lechat of compositions having all of applicants limitations. However, to arrive at the claimed compositions by selecting from the various disclosures of the reference would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of adequate results, absent any showing of surprising or unexpected results.

Claims 1-4 and 6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Diehl et al. (US 5,292,819).

Diehl disclose applicants radial block copolymer compositions in Examples 1-4 of the Table in column 14. Note that waxes may be added at column 15, lines 55-62 and that the material may be used to produce diapers at the paragraph bridging columns 5 and 6. With re to claim 6 it is assumed that at least a very small amount of diarm coupled polymer would be produced by the process given the known inefficiency of coupling of

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Lechat is not longer used to reject applicants claims under 35 USC 102 as applicants have deleted "about" from "about 25 wt %". However, patentees disclose that styrene contents of as much as 35% maybe used in paragraphs 68 and 69. With re to applicants amount of linear block copolymer, "up to" encompasses zero.

With re to Diehl, no chemical reaction is 100% efficient and therefore it more than reasonably appears that Diehls' material has at least a small amount of uncoupled (linear) diblock copolymer. Diehl acknowledges this fact in paragraph 29 where it is stated that "during the coupling reaction involved in producing radial block copolymers not all the polymer will be coupled". ". In any case addition of polymers is disclosed at column 7, lines 15-26.

The materials of Kueppers are adhesives and it is reasonable to assume they be capable of adhering to elastomeric materials. The claims do not explicitly or implicitly require any particular viscosities.

With re to the double patenting rejection, applicants' "radial" block copolymer actually appears to include unlimited amount of diblock copolymer (at least with re to the independent claims) and therefore applicants actual amount of "radial" copolymer (ie material having at least 3 arms) can be less than 15 wt% and there is nothing in the claims of the copending application indicating anything but the ordinary meaning of "radial" which is used in the art.

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Any inquiry concerning this communication should be directed to Jeffrey C. Mullis  
at telephone number 571 272 1075.

Jeffrey C. Mullis  
Primary Examiner  
Art Unit 1796

JCM

12-21-07

A handwritten signature in black ink, appearing to be 'JCM', with a large loop and a horizontal stroke.